

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1-12. (Canceled)

13. (Previously Presented) A speech recognition system in which a word to be recognized is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, comprising:

means for estimating the number of phonetic segments in the word to be recognized;
and

means for biasing the transition probabilities in dependence on the estimated number of phonetic segments in the word.

14. (Original) A speech recognition system according to claim 13, wherein the biasing means comprise means for applying a transition bias to each of the transition probabilities between a plurality of phonetic segment models.

15. (Previously Presented) A speech recognition system according to claim 14, operable to recognize words from a recognition vocabulary, wherein the transition bias is calculated as the transition bias which maximizes recognition performance on a validation data set which represents the recognition vocabulary.

16. (Original) A speech recognition system according to claim 15, wherein the validation data set has the same vocabulary as the recognition vocabulary.

17. (Canceled)

18. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a speaker specific rate of speech estimator.

19. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a Free Order Viterbi decoder.

20. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a neural network classifier.

21. (Previously Presented) A speech recognition system according to claim 13, wherein the transition bias is set in response to the result of the estimating means.

22. (Previously Presented) A speech recognition system according to claim 21, comprising table look-up means for setting the transition bias in accordance with the number of phonetic segments in the word.

23. (Previously Presented) A speech recognition system according to claim 21, comprising direct setting means for setting the transition bias as proportional to the number of phonetic segments in the word.

24. (Previously Presented) A speech recognition system according to claim 23, wherein the direct setting means is arranged to set the transition bias to be equal to the number of phonetic segments in the word.

25. (Previously Presented) A speech recognition system according to claim 13, wherein each phonetic segment comprises a phoneme.

26. (Canceled)

27. (Previously Presented) A speech recognition system in which a word to be recognized is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, comprising:

a phonetic segment estimator arranged to output an estimate of the number of phonetic segments in the word; and

a processing module for applying a transition bias to the transition probability in dependence on the estimate of the number of phonetic segments in the word.

28. (Previously Presented) A portable communications device including a speech recognition system according to claim 27.

29. (Previously Presented) A method of speech recognition in which a word to be recognized is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, the method comprising biasing the transition probabilities in dependence of the number of phonetic segments in the word.

30. (Original) A method according to claim 29, comprising decoding the sequence of phonetic segment models after application of the transition bias.

31. (Previously Presented) A method according to claim 29, comprising decoding the sequence of phonetic segment models without the application of transition bias and normalizing the resulting scores by a contribution proportional to the transition bias.

32. (Original) A method according to claim 31, comprising calculating the transition bias in parallel with the decoding of the sequence of phonetic segment models.

33. (Previously Presented) A speech recognition system according to claim 13, further comprising means for performing word recognition for the word on an individual basis based on the biased transition probabilities.

34. (Previously Presented) A speech recognition system according to claim 33, further comprising means for performing word recognition for each word in a multiword sentence based on a biased transition probability determined separately for each corresponding word in the sentence based on the estimated number of phonetic segments in the each corresponding word.

35. (Previously Presented) A speech recognition system according to claim 27, wherein the processing module is configured to perform word recognition for the word on an individual basis based on the biased transition probabilities.

36. (Previously Presented) A speech recognition system according to claim 35, wherein the processing module is configured to perform word recognition for each word in a multiword sentence based on a biased transition probability determined separately for each corresponding word in the sentence based on the estimated number of phonetic segments in the each corresponding word.

37. (Previously Presented) A method according to claim 29, further comprising performing word recognition for the word on an individual basis based on the biased transition probabilities.

38. (Previously Presented) A method according to claim 37, further comprising performing word recognition for each word in a multiword sentence based on a biased transition probability determined separately for each corresponding word in the sentence based on the estimated number of phonetic segments in the each corresponding word.

39. (Previously Presented) A method comprising:
receiving a word to be recognized represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models;
biasing the transition probabilities in dependence of the number of phonetic segments in the word; and
performing word recognition for the word on an individual basis based on the biased transition probabilities.

40. (Previously Presented) A method according to claim 39, further comprising performing word recognition for each word in a multiword sentence based on a biased transition probability determined separately for each corresponding word in the sentence based on the estimated number of phonetic segments in the each corresponding word.

41. (New) An apparatus comprising a processing element configured to:
estimate a number of phonetic segments in a word to be recognized; and
bias transition probabilities in dependence on the estimated number of phonetic segments in the word to be recognized,
wherein the word to be recognized is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models.